

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virginia 22313-1450 www.msylo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,246	01/18/2001	Jonathan Lowthert	BKA.0008US	8160
21906 7590 10/27/2009 TROP, PRUNER & HU, P.C.			EXAMINER	
1616 S. VOSS	ROAD, SUITE 750		RAMAN, USHA	
HOUSTON, TX 77057-2631			ART UNIT	PAPER NUMBER
			2424	
			MAIL DATE	DELIVERY MODE
			10/27/2009	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.usplo.gov

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/765,246 Filing Date: January 18, 2001 Appellant(s): LOWTHERT ET AL.

> Timothy Trop For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 20, 2009 appealing from the Office action mailed April 30, 2009.

Art Unit: 2424

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

Art Unit: 2424

## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (8) Evidence Relied Upon

6,029,045	Picco et al.	2-2000
6,324,519	Eldering	11-2001
6,594,699	Sahai et al.	7-2003
2005/0149964	Thomas et al.	7-2005
2003/0037068	Thomas et al.	2-2003

### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-2, and 7-10, rejected under 35 U.S.C. 103(a) as being unpatentable over

Picco et al. (US Pat. 6,029,045) in view of Eldering (US Pat. 6,324,519).

With regards to claim 1, Picco discloses a system for allowing the use of content (see column 4, lines 51-54) on a content receiver;

Collecting information about content usage of a viewer of the receiver (see col. 10, lines 59-62, col. 11, lines 10-12)

A remote-processor based system (agent 150) determines based on collected statistical data (col. 7, lines 15-24), determines a first subset of local content including advertising resources to a distribution audience. See column 7, lines 28-31

Application/Control Number: 09/765,246
Art Unit: 2424

Picco discloses that not all the households receiving the first subset of advertising resources actually store the content. Rather only a predetermined portion of the received pieces (i.e. a second subset) maybe stored by the set top box after comparing content profile of the received pieces with user preferences (see column 4 lines 1-4, col. 6 lines 25-34). Therefore Picco teaches the step of automatically and selectively choosing (by matching/filtering) on the receiver without user intervention an advertising resource from the firs subset listing based on usage preference indicating content usage of the user of the receiver to compile a second subset (i.e. when a match is found at step 234, fig. 9) of advertising resources; and

Capturing (downloading) an advertisement listed on the second subset listing of advertising resources to store the advertisement on the content receiver (see column 7, lines 56-61).

Picco discloses that user preferences includes content usage information (col. 11 lines 10-12). Picco further discloses that the set top box permits the user to browse the world wide web while viewing a television program (see column 13, lines 23-26), wherein the set top box determines if a web browser has been activated (see column 14, lines 22-25). Picco however is silent that the content usage information additionally comprises web usage information including web sites visited by the user of the receiver, wherein the advertising resources are chosen based in part on the web sites visited by the user.

Eldering additionally discloses a method collecting usage information about a consumer including web sites viewed by the user (col. 4 lines 42-44, lines 55-56,

Application/Control Number: 09/765,246 Art Unit: 2424

and lines 62-65).

It would have been obvious to one of ordinary skill in the art to modify the usage monitoring step of Picco in view of Eldering to additionally monitor Internet usage such as web sites viewed by the user, thereby providing better subscriber characterization method for targeting ads. The modified system accordingly discloses user preference comprising content usage information (Picco: col. 11 lines 10-13), including web sites viewed by the user (Eldering: col. 4, lines 42-44), wherein advertising resource is selected from the first subset based on the preference information (Picco: col. 6 lines 29-34). Accordingly the selected advertising resource is based on user preference information, including Internet usage of web sites visited by the user.

With regards to claim 2, the modified system comprises a method as stated above in Claim 1, wherein the set top box is operable to update content (see Picco: Col. 7, Lines 35-41) by storing selected local content as stated above, including overwriting or removing selected content (see Picco: Col. 10, Line 62- Col. 11, Line 1). This reads on the claimed combining the advertising listing with subset with advertising available on the receiver Examiner further takes Official notice that updating content can include the step of adding data thereby expanding the local database. It would have been obvious to one of ordinary skill in the art to further modify the system by combining the subset listing of advertising resources with advertising resources available on the receiver in order to expand the database at the local receiver. The modified system additionally comprises the method of

Art Unit: 2424

automatically and selectively choosing advertisement resources previously available on the receiver to create the second subset listing. See column 10. lines 13-18.

With regards to claim 7, the modified system comprises a method as stated above in Claim 1, wherein the advertising has associated an associated content profile, which is compared to the user's profile for storage and playback (see Picco: Col. 7, Line 55 - Col. 8, Line 22). This reads on the claimed determining a characteristic of advertising and comparing it to information about the use of the receiver.

With regards to Claim 8, the modified system comprises a method as stated above in Claim 1, wherein a user is operable to select television signals from satellite broadcasting for watching (Picco: col. 5, Lines 10-16). The watching of satellite television signal reads on the claimed enabling a variety of content to be selected for play at any time.

With regard to claims 9, the modified system discloses inserting (splicing) advertising data into program while a program is displayed. See Picco: column 14, lines 4-13. By inserting the advertisement while the program is still playing, the advertisement is inserted after allowing the content to be used for a predetermined about of time. Accordingly the playback of the programming content is replaced with the playback of the advertisement.

With regards to claim 10, the system is silent on the step of controlling the number of times a user may access content other than advertising that is stored on the receiver. Examiner takes official notice that fee based premium contents were

Art Unit: 2424

well known in the art at the time of the invention, wherein it is further desirable to control the number of times a user may access such premium content. It would have been obvious to further modify the system by controlling the number of times a user may access premium content other than advertising so that usage to premium content can be restricted based on fees paid.

Claims 3-6, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al. (US Pat. 6,029,045) in view of Eldering (US Pat. 6,324,519) as applied to claim 1 above, and further in view of Thomas et al. (US PG Pub. 2005/0149964), henceforth referred to as Thomas '964.

With regards to claim 3, the modified system of claim 1 is silent on the step of monitoring application software that the user has utilized. In a further analogous art, Thomas '964 discloses collecting information about user's usage of other non-program guide applications in addition to usage on programming and ads. See [0058]. Therefore, it would have been obvious to one of ordinary skill in the art to further modify the system by further collecting information about application software that a user has utilized thereby developing better characterization about user's usage patterns.

With regards to claim 4, the modified system comprises a method as stated above in claim 3, wherein collecting information includes accumulating the collected data (see Picco, column 11, lines 9-13). This accumulation of the user reads on the claimed developing a database of information about activities undertaken by the

Art Unit: 2424

user of the receiver.

With regards to claim 5, the modified system comprises the step of receiving the first subset of advertising resources from a database of advertising resources located on the remote processor based system based on information about the user of the receiver (see column 6, lines 57-61, and column 7, lines 6-23).

With regards to claims 6, Picco further comprises the step of compiling the second subset based on patterns of a user at the receiver. See column 10, lines 5-10.

With regard to claim 33, the modified system is silent on the step of collecting information about a characteristic of software that is present on the receiver.

In an analogous art, Thomas '964 discloses collecting information about user's usage of other non-program guide applications. See [0058]. One of ordinary skill in the art would recognize that such information collection would be useful in gathering additional information regarding the user and subsequently aiding in better targeting content to the user. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system in view of Thomas' teachings by additionally collecting information about a characteristic of at least one of software that is present on the receiver. It is further noted that in monitoring user's usage of application programs, the system monitors characteristic of software that is present on the receiver.

Art Unit: 2424

Claims 11-20, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al. (US Pat. 6,029,045) in view of Eldering (US Pat. 6,324,519) and Thomas et al. (US Pat. 2003/0037068), henceforth referred to as Thomas '068.

With regards to claim 11, Picco discloses a system for allowing the use of content (see column 4, lines 51-54) on a content receiver;

A remote-processor based system (agent 150) determines based on collected statistical data (col. 7, lines 15-24), determines a first subset of local content including advertising resources to a distribution audience. See column 7, lines 28-31

Picco discloses that not all the households receiving the first subset of advertising resources actually store the content. Rather only a predetermined portion of the received pieces (i.e. a second subset) maybe stored by the set top box after comparing content profile of the received pieces with user preferences (see column 4 lines 1-4, col. 6 lines 25-34). Therefore Picco teaches the step of automatically and selectively choosing (by matching/filtering) on the receiver without user intervention an advertising resource from the firs subset listing based on usage preference indicating content usage of the user of the receiver to compile a second subset (i.e. when a match is found at step 234, fig. 9) of advertising resources; and

Capturing (downloading) an advertisement listed on the second subset listing of advertising resources to store the advertisement on the content receiver (see column 7, lines 56-61).

Picco discloses that user preferences includes content usage information

Art Unit: 2424

(col. 11 lines 10-12). Picco further discloses that the set top box permits the user to browse the world wide web while viewing a television program (see column 13, lines 23-26), wherein the set top box determines if a web browser has been activated (see column 14, lines 22-25). Picco however is silent that the content usage information additionally comprises web usage information including web sites visited by the user of the receiver, wherein the advertising resources are chosen based in part on the web sites visited by the user. Picco additionally fails to disclose automatically interrupting the use of content in response to detecting a pause in content usage and that while the content usage is paused, enable the receiver to temporarily replace the content with advertising.

Eldering additionally discloses a method collecting usage information about a consumer including web sites viewed by the user (col. 4 lines 42-44, lines 55-56, and lines 62-65).

In a further related art, Thomas '068 discloses detecting pause in content usage, responsive to which interrupting the content temporarily to replace with an advertisement, wherein, the place in the content where the pause occurs, if the pause occurs at all is not determined by a content provider (i.e. use initiated pause). See Thomas: [0011].

It would have been obvious to one of ordinary skill in the art to modify the usage monitoring step of Picco in view of Eldering to additionally monitor Internet usage such as web sites viewed by the user, thereby providing better subscriber characterization method for targeting ads. The modified system accordingly

Art Unit: 2424

discloses user preference comprising content usage information (Picco: col. 11 lines 10-13), including web sites viewed by the user (Eldering: col. 4, lines 42-44), wherein advertising resource is selected from the first subset based on the preference information (Picco: col. 6 lines 29-34). Accordingly the selected advertising resource is based on user preference information, including Internet usage of web sites visited by the user.

It would have been obvious to one of ordinary skill in the art to further modify the system in view of Thomas' teachings by replacing the content with a previously stored advertisement when a pause is detected to present the advertisement to the user. The motivation is to present useful information such as targeted advertisements that are in conformance with viewer's preferences over the duration of user initiated pause.

With regards to claims 12, the modified system further comprises a method where a user is operable to select television signals from satellite broadcasting for watching (see Picco: column 5, lines 10-16). It further noted that satellite systems were known in the art at the time to present a variety of contents over a plurality of programming channels through various times. Such a selection accordingly reads on the claimed enabling a variety of content to be selected for play at any time.

With regards to claims 13, the modified system further comprises wherein collecting information includes monitoring activities of the user of the receiver (column Picco: 11, lines 9-13).

With regards to claims 14 the modified system further comprises wherein

Art Unit: 2424

collecting information includes accumulating the collected data (see Picco: column 11, lines 9-13). This accumulation of the user data read on the claimed developing a database information about activities undertaken by the user of the receiver.

With regards to claim 15, the modified system further comprises wherein advertisements are stored in a remote database and a subset of these ads are broadcast to user terminals for selective storage based on user profile information as stated above. This reads on the claimed selecting advertisements stored on the remote processor-based system (ads from the head-end's database) based on information about the user of the receiver (user profile).

With regards to claim 16, the advertisement resources are broadcast for storage at the receiver as stated above. In order to facilitate retrieval of the data, the user's terminal must catalog the data it has stored (see column 10, lines 62-67). This reads on the claimed local electronic program guide (catalog of files) compiled.

With regards to claim 17, the system further comprises wherein the advertising has associated an associated content profile, which is compared to the user's profile for storage and playback (see Picco: Col. 7, Line 55 - Col. 8, Line 22). This reads on the claimed determining a characteristic of advertising and comparing it to information about the use of the receiver.

With regards to claims 18, and 19, Picco discloses, wherein content has n expiration date (Co1.6, Lines 61-67) and a maximum number of times it may be viewed (Col. 7, Lines 1-2). Further, the terminal may remove or overwrite content (Col. 10, Line 62 - Col. 11, Line 1). This reads on the claimed automatically replacing

Art Unit: 2424

(overwriting) the content with advertising after allowing content to be used for a predetermined amount of time (date or number of views). This further reads on the claimed automatic determination at predetermined times whether to replace the content.

With regards to claim 20, Picco discloses an article as stated above in Claim 11, further storing instructions that enable to receiver to catalog the advertisements it has stored as stated above. This reads on the claimed automatically compiling a receiver- based database of advertising. Additionally, only advertisements matching the receiver characteristics are downloaded, and therefore the database includes a subset of selections from the subset listing.

With regard to claim 34, the modified system does not disclose the step of detecting a user-initiated pause in content usage and in response to detecting a pause in content usage, automatically interrupting the use of the content to temporarily replace the content with a previously stored advertisement, the place in the content where the pause occurs, if the pause occurs at all is not determined by the content provider.

Thomas '068' discloses detecting pause in content usage, responsive to which interrupting the content temporarily to replace with an advertisement, wherein, the place in the content where the pause occurs, if the pause occurs at all is not determined by a content provider (i.e. use initiated pause). See Thomas: [0011].

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system in view of Thomas' teachings by replacing the

Art Unit: 2424

content with a previously stored advertisement when a pause is detected to present the advertisement to the user. The motivation is to present useful information such as targeted advertisements that are in conformance in accordance with viewer's preferences as well as based on receiver capabilities over the duration of the pause.

Claims 21-28, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al. (US Pat. 6,029,045) in view of Thomas et al. (US Pat. 2003/0037068), henceforth referred to as Thomas '068, and Sahai et al. (US Pat. 6,594,699).

With regards to claim 21, Picco discloses a computer-based terminal comprising a receiver for receiving the transmission of content;

Storage coupled to the receiver storing instructions that enable the receiver to determine information about characteristic of the receiver (such as user preference, see column 7, lines 12-23);

Receive from a remote-processor based system (agent 150) determines based on collected statistical data (col. 7, lines 15-24), a first subset of local content including advertising resources. See column 7, lines 28-31.

Picco discloses that at a given household, only a predetermined portion of the received pieces (i.e. a second subset) maybe stored by the set top box after based on a characteristic of the receiver (such as a user preference, see column 4 lines 1-4, col. 6 lines 25-34).

Capturing (downloading) an advertisement listed on the second subset listing of advertising resources to store the advertisement on the content receiver (see

Art Unit: 2424

column 7, lines 56-61). It is further noted the step pf executing the methods steps in a computer based terminal runs a program, reading on the claimed shell.

Picco fails to disclose determining a characteristic of receiver hardware and further fails to disclose the step of enabling the use of content to be paused and temporarily replaced with a previously stored advertising.

In a related art, Thomas '068' discloses detecting pause in content usage, responsive to which interrupting the content temporarily to replace with an advertisement, wherein, the place in the content where the pause occurs, if the pause occurs at all is not determined by a content provider (i.e. use initiated pause). See Thomas: [0011].

Sahai further discloses a system for capability based multimedia streaming over a network, wherein in addition to preferences, system capabilities, including hardware is determined (col. 2, lines 23-28, col. 3, lines 23-60, col. 5 lines 8-14, col. 6 lines 17-21). By determining a characteristic of receiver hardware, the server is aware of client capabilities in order to optimally service any requests.

It would have been obvious to one of ordinary skill in the art to modify the system in view of Thomas' teachings by replacing the content with a previously stored advertisement when a pause is detected to present the advertisement to the user. The motivation is to present useful information such as targeted advertisements that are in conformance with viewer's preferences over the duration of user initiated pause. It would have been obvious to one of ordinary skill in the art at the time the invention to further modify the monitoring system including viewer

Art Unit: 2424

characteristics to further include hardware capabilities for the purpose of providing service providers with data regarding the capabilities of user systems in order to efficiently service requests based on client capabilities.

With regards to claim 22, the modified system further comprises, wherein the system is a television receiver (Co1. 5, Lines 12-16)

With regards to claims 23, and 24, the modified system further comprises wherein content has n expiration date (Picco: Co1.6, Lines 61-67) and a maximum number of times it may be viewed (Picco: Col. 7, Lines 1-2). Further, the terminal may remove or overwrite content (Picco: Col. 10, Line 62 - Col. 11, Line 1). This reads on the claimed automatically replacing (overwriting) the content with advertising after allowing content to be used for a predetermined amount of time (date or number of views). This further reads on the claimed automatic determination at predetermined times whether to replace the content.

With regards to claims 25, the modified system further comprises a method where a user is operable to select television signals from satellite broadcasting for watching (see Picco: column 5, lines 10-16). It further noted that satellite systems were known in the art at the time to present a variety of contents over a plurality of programming channels through various times. Such a selection accordingly reads on the claimed enabling a variety of content to be selected for play at any time.

With regards to claims 26, the modified system further comprises wherein collecting information includes monitoring activities of the user of the receiver (column Picco: 11, lines 9-13).

Art Unit: 2424

With regards to claims 27 the modified system further comprises wherein collecting information includes accumulating the collected data (see Picco: column 11, lines 9-13). This accumulation of the user data read on the claimed developing a database information about activities undertaken by the user of the receiver.

With regards to claims 28 and 31, the modified system further comprises wherein the storage stores instructions that enable the receiver to access a database of available advertisements on a specialized remote processor based system (see Picco: column 6, lines 57-61).

With regards to claim 30, the advertisement resources are broadcast for storage at the receiver as stated above. In order to facilitate retrieval of the data, the user's terminal must catalog the data it has stored (see Picco: column 10, lines 62-67). This reads on the claimed local electronic program guide (catalog of files) compiled without user intervention to the second subset of advertising resources captured from the remote processor. The second subset of advertising resources is based on activity of the user that is finer tuned that the first subset listing as discussed above.

With regards to claim 32, the modified system does not disclose that the database of available advertisements are specialized for a language other than the national language spoken in the location of the receiver. Examiner takes official notice that it was well known in the art for local headends to support content programming in a language other than that national language because it is widely spoken in that region. As such it would have been obvious to modify the system to

Art Unit: 2424

have database specialized with advertisements in languages other than the national language spoken in the location of the receiver in order to target add to speakers of the other languages.

#### (10) Response to Argument

The examiner respectfully disagrees that the rejection should be reversed. Only those arguments having been raised are being considered and addressed in the Examiner's Answer. Any further arguments regarding other elements or limitations not specifically argued or any other reasoning regarding deficiencies in a prima facie case of obviousness that the appellant could have made are considered by the examiner as having been conceded by the appellant for the basis of decision of this appeal. They are not being addressed by the examiner for the Board's consideration. Should the panel find that the examiner's position/arguments or any aspect of the rejection is not sufficiently clear or a particular issue is of need of further explanation, it is respectfully requested that the case be remanded to the examiner for further explanation prior to the rendering of a decision. See 37 CFR 41.50(a)(1) and MPEP 1211.

Appellant argues (see Brief, page 11) that, "Thomas teaches that one could collect the information about non-program guide applications" further stating that it does not provide any basis for collecting information about websites that are actually visited by the user. Appellant's arguments suggest that appellants appear to have misunderstood the rejection for the claim, as it is noted that claims 1-2, and 7-10 are in fact rejected as being over Picco in view of *Eldering* and not in view of Thomas.

Art Unit: 2424

Appellant's argues (see Brief, page 11) that, "filt would seem that getting information about the web sites that are actually visited would be much more useful in determining which advertisements to play than would be information about what application the user uses". Examiner notes that Eldering precisely teaches (see Col. 4, lines 42-44) just that, "In a preferred embodiment, the channels or web sites viewed by a subscriber are monitored, and heuristic rules are applied to the sites to better determine the demographic and product preference characteristics of the subscriber" (see also col. 4, lines 55-56 and 62-65). Eldering clearly discloses the step of "collecting information about web sites visited by a user of the receiver" wherein examiner submits that one of ordinary skill in the art, at the time of the invention, would have found it obvious to incorporate the teachings of Eldering into the system of Picco to advantageously monitoring a user's web-surfing habits, thereby being able to better characterizing the user's characteristics thereby aiding in better targeting of advertisements. Appellant's arguments (see Brief, pages 11-12) pertaining to cookies have also been noted however are considered moot in view of the teachings disclosed by Eldering that have been relied upon for the rejection of claims 1-2 and 7-10.

Appellant further argues (see Brief, page 12) that, "[w]ith respect to claim 21, there is no suggestion in any of the prior art of looking at the hardware on the system and using that to select advertisements", stating that (see Brief, page 12), "Thomas '964 teaches collecting information about the user's usage of non-program guide application" and thus (see Brief, page 12), "hardly seems to provide any rationale to use information about hardware resources on the receiver to do the same thing". Appellant's arguments

Art Unit: 2424

again suggest appellant's mischaracterization of the rejection, as Thomas '068, is relied upon for the teachings of detecting pause in content usage and displaying advertisements during the pause operation, and not Thomas '964 is used in the rejection of Claim 21. More importantly, appellant appears to have overlooked the Sahai reference which is specifically relied upon for the teaching a storage (server) to determine information about a characteristic of the receiver (client) hardware so that media can be transmitted to the client in accordance with the client capabilities. See Sahai: col. 2 lines 23-28, col. 3, lines 23-60, col. 6, line 17-21. Accordingly, one of ordinary skill in the art, at the time of the invention, would have found it obvious to further monitor hardware capabilities of a receiver so that data can be transmitted to a receiver based on a receiver capabilities. It would be apparent to one of ordinary skill in the art that the modified system would minimize scenarios where a service provider ends up providing advertising or other programming to a user whose device incompatible or not capable of being rendering such programming due to hardware limitations

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained. Respectfully submitted,

/Usha Raman/

Application/Control Number: 09/765,246 Page 21

Art Unit: 2424

Conferees:

/Christopher Kelley/

Supervisory Patent Examiner, Art Unit 2424

/Christopher Grant/

Supervisory Patent Examiner,

Technology Center 2400